CITY OF ST. JOSEPH LAND DISTURBANCE REQUIREMENTS

SECTION 1. GENERAL PROVISIONS

1.1 APPLICABILITY

In accordance with the City of St. Joseph Ordinance Chapter 25 Article 1, Section 25-9, this section applies to all land development, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to Section 1.2. These provisions apply to any new development or redevelopment site within the city limits of St. Joseph that meets one or more of the following criteria:

- (1) Land development that disturbs a surface area of 1000 square feet or more;
- (2) Sites requiring a subdivision plat approval or the construction of a house or houses or commercial, industrial or institutional building on lots of approved subdivision plats;
- (3) Sites requiring a certified survey approval or the construction of dwellings or commercial industrial or institutional buildings on lots of approved certified surveys;
- (4) Land disturbance activities that will disturb 500 square feet if the activity is located within 25 feet of a river, stream, lake, watercourse or wetland.
- (5) Land development activities that are smaller than the minimum applicability criteria set forth above if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.

1.2 EXEMPTIONS

The following activities are exempt from this ordinance:

- (1) Projects that are exclusively for agricultural and silvicultural uses.
- (2) Maintenance and repair to any stormwater BMP deemed necessary by City of St. Joseph Public Works.
- (3) Any emergency project that is immediately necessary for the protection of life, property, or natural resources.
- (4) Linear construction projects, such as pipeline or utility line installation that does not result in the creation of impervious cover or land disturbance greater than one acre, as determined by City of St. Joseph Engineering Department. Such projects must be designed to minimize the number of stream crossings and width of disturbance, and are subject to erosion and sediment control practices.

1.3 REQUIREMENTS OF OTHER AGENCIES

Rules and regulations of other agencies also pertain to stormwater management systems, which may or may not compliment these criteria. When conflicts are encountered, the more stringent criteria shall govern. The following agencies have jurisdiction over streams and/or discharges from stormwater collection systems and may require additional permits. Other regulations, permits and requirements may not be limited to these agencies.

- Federal Emergency Management Agency (FEMA)
- U S. Army Corps of Engineers
- Missouri Department of Natural Resources
- Environmental Protection Agency

SECTION 2 LAND DISTURBANCE PERMIT APPLICATION PROCESS

2.1 GENERAL

For projects greater than one (1) acre, all applicants shall participate in a concept review and preapplication meeting with the Public Works and Planning departments to discuss potential approaches for stormwater design and opportunities to use design techniques to reduce runoff rates, volumes, and pollutant loads. During the pre-application meeting, the applicant shall provide information regarding design considerations as outlined in the Concept Review Checklist as supplied by Building Division.

2.2 Application Requirements

For sites **less than one acre**, St. Joseph Building Department must approve the following items before a land disturbance permit can be issued:

- Completed Land Disturbance Application
- Permit fees
- Erosion and Sediment Control Drawing

For sites **greater than one acre**, St. Joseph Engineering Department must approve the following plans before a land disturbance permit can be issued:

- Completed Land Disturbance Application
- Permit fees
- Rough Grading Plan
- Erosion and Sediment Control Plan
- Stormwater Pollution Prevention Plan (SWPPP)

Once the applicant receives a permit, a preconstruction meeting is required on sites greater than one acre, prior to clearing of land. Details for the preconstruction meeting can be found in Section 2.3. The Land Disturbance Permit requirements are found in Section 3.

2.2.1 ROUGH GRADING PLAN REQUIREMENTS

The site grading and drainage plan must be included in the application and shall include the following information:

Existing features

- Site description in order to identify the site.
- Drainage area map showing topography of the drainage basin(s) contributing to the site.
 The scale of the map shall be no smaller than 1 inch = 200 feet for drainage areas up to
 five hundred (acres). A topographic map of appropriate scale shall be provided for larger
 areas upstream from the design area. A drainage map is to show total acreage of the site
 and the acreage of all drainage areas contributing to the site.
- A site plan drawing have a scale no smaller than 1 inch = 100 feet and existing contour intervals of not more than two (2) feet. The plan shall show topographic features such as highways, utilities, natural water courses, exiting drainage facilities and structures, adjacent property lines, north Arrow, scale, and vicinity map. The site plan must show the limits of the adopted 100 year floodplain on the site and any critical areas such as streams, lakes, ponds and wetlands. Area geologic types of predominate soils as well as the nature and extent of the existing vegetation shall also be shown on the plan.

Proposed alterations of the site

- Site description in order to identify the site,
- A final site plan drawing showing the location or relocating of all utilities, planned streets, roads, buildings, parking lots and structures, and all permanent stormwater management facilities.

2.2.2 EROSION AND SEDIMENT CONTROL PLAN REQUIREMENTS

Temporary erosion and sediment control measures during active construction

- A plan drawing that shows the limits of clearing and grading, cuts and fills and final contours at two (2) foot intervals. The plan drawing shall show the direction of flow and pre and post drainage area divides, identify the phasing of the grading and show the area(s) to be cleared of vegetation. The drawing must also include locations of steep slopes, and impervious surfaces
- The plan drawing shall identify the following features:
 - · Location of natural features and areas where clearing will be prevented.
 - 25 foot buffers as required for wetlands and surface waters.
 - · Location of soil stockpiles
 - · Construction entrance and exit points
 - · All stormwater outfalls
- Drawings shall show types and locations of all structural erosion and sediment control best management practices. The drawings shall have sufficient information and detail to be of practical use to contractors and site construction workers. Drawings shall note if the BMPs are temporary or permanent. Drawings shall include and BMPs used during all phases of construction.

 Drawings must show the calculated run off area that drains to each BMP. All overland flow drainage patters shall be marked.

2.2.3 SWPPP REQUIREMENTS

The SWPPP must include the following components:

- A narrative description of the construction activities and the potential for sediment and other pollutant discharges from the site.
- All erosion prevention and sediment control BMPs to be used for the life of the project.
- Timing of installation for all erosion prevention and sediment control BMPs and permanent stormwater management systems.
- Stormwater design specifications and calculations for stormwater management systems, including the number of acres of existing and new impervious surfaces.
- Location and type of all permanent and temporary erosion prevention and sediment control BMPs to be installed at the site along with procedures to establish additional BMPs as necessary.
- Areas not to be disturbed on the site, including the location of buffer zones.
- Locations of areas to be phased to minimize duration of exposed soils.
- Methods used to achieve final stabilization.
- Discussion of how changes made throughout construction should be documented in the SWPPP.
- A maintenance plan for permanent stormwater treatment systems, including who will maintain the system.
- A description of pollution prevention measures for storage, handling and disposal of hazardous materials, solid waste, concrete and equipment wash water, portable toilets, construction products and materials.
- Plans for proper use of sediment treatment chemicals (polymers, flocculants, etc.).
- A description of inspection and maintenance activities and record keeping.
- Training documentation for all individuals required to be trained in associated duties in regard to the SWPPP.
- Procedures for terminating permit coverage.

2.3 Preconstruction Meeting

Once the land disturbance permit is issued, the applicant must schedule a preconstruction meeting to be held on the construction site for all projects affecting more than one (1) acre. The purpose of the preconstruction meeting will be to review and coordinate the overall project with the terms and conditions contained within the approved erosion and sediment control plan required by the City's land disturbance permit. The owner of the permit or contractor in charge of the day to day interpretation, installation, maintenance and oversight of the implementation of the erosion control plan and SWPPP will be required to attend the preconstruction meeting. The name and phone number of the person designated in charge of the installation and maintenance of the on-site erosion controls will be required at the time of the preconstruction meeting.

Prior to the meeting, the SWPPP designee must post a copy of the MoDNR land disturbance permit and a site map at the entrance to the construction site. The SWPPP designee may install the following

practices prior to the meeting: perimeter controls, construction entrance, inlet protection and fencing for preservation of vegetation areas. These BMPs will be inspected during the preconstruction meeting.

The preconstruction meeting will also identify and map the locations of pollutant generating activities such concrete washout, building products, pesticides, herbicides, fertilizer, treatment chemicals, hazardous materials, solid waste, portable toilets, etc.

Section 3 Construction Site Runoff Control

3.1 GENERAL

Grading, erosion control practices, sediment control practices and waterway crossings shall be adequate to prevent transportation of sediment from the construction site. The design and construction guidance in this document shall be followed. Other pollutants shall be controlled as necessary to prevent potential discharge to waters of the State.

3.2 LAND DISTURBANCE PERMITS

Applicability: No clearing, grading, borrowing or filling of land resulting in a land disturbance greater than 1000 square feet shall commence prior to obtaining a land disturbance permit. All such work shall also comply with an approved erosion and sediment control plan in conjunction with an approved site development plan.

Land disturbance permits will be issued by the City of St. Joseph for a site defined and approved at the time of issuance. Permits cannot be modified after issuance to include areas not defined at the time of the original permit issuance. The permit coverage cannot be extended past the expiration date printed on the original permit without written request for extension. Land disturbance permits and all of the conditions contained within will remain in effect for the term of if the issued permit, not to exceed 2 years unless the permit is terminated by inspection.

Best Management Practices selected for installation on sites permitted for land disturbance activities shall conform to American Public Works (APWA) Kansas City Metropolitan Chapter Standards for Erosion and Sediment Control or equivalent construction standards. The engineer shall note and include construction details with SWPPP for structures included in drawings and plans. The following criteria apply:

3.2.1 CLEARING AND GRADING

- (1) Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other City regulations.
- (2) Clearing techniques that retain natural vegetation and retain natural drainage patterns shall be used to the maximum extent practicable.

- (3) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
- (4) Steep slopes of 12% or more may require use of additional best management practices as determined by the Director of Public Works or his representative.
- (5) Phasing shall be required on all sites disturbing greater than thirty acres, with the size of each phase to be established at plan review.
- (6) Other measures may be required in order to ensure that sediment is not tracked onto public streets by construction vehicles, or washed into storm drains.

3.2.2 EROSION CONTROL

- (1) Soil must be stabilized within 14 days of clearing or inactivity in construction, unless otherwise authorized, and shall be effectively maintained throughout the duration of any inactivity.
- (2) Soil stockpiles must be located at least 25 feet from any downslope road, lake, stream, wetland, ditch, channel or other watercourse. Soil stockpiles must be stabilized or covered at the end of each work day unless otherwise protected from allowing sediment to leave the site.
- (3) Techniques shall be employed to prevent the blowing of dust or sediment from the site.
- (4) Techniques that divert upland runoff past disturbed slopes shall be employed.

3.2.3 SEDIMENT CONTROLS

- (1) Sediment controls shall be provided in the form of settling basins or sediment traps or tanks, and perimeter controls.
- (2) Where possible, settling basins shall be designed in a manner that allows adaptation to provide long term stormwater management.
- (3) Adjacent properties shall be protected by the use of a vegetated buffer strip, in combination with perimeter controls wherever possible.

3.2.4 WATERWAYS AND WATERCOURSES

- (1) When a wet watercourse must be crossed regularly during construction, a temporary stream crossing shall be provided, and an approval obtained from the U.S. Army Corps of Engineers and the Missouri Department of Natural Resources if deemed a jurisdictional stream.
- (2) When in-channel work is conducted, the channel shall be stabilized before, during and after work.
- (3) Stabilization adequate to prevent erosion must be provided at the outlets of all pipes and paved channels.

3.2.5 CONSTRUCTION SITE ACCESS

- (1) A temporary access road or driveway shall be provided at all sites.
- (2) Regardless of the amount of land disturbance at a particular site, it shall be the responsibility of the permit holder and/or property owner to ensure streets open to the public surrounding a permitted site are kept free of debris and sediment throughout construction. Upon notification that a problem exists, the permit holder and/or property owner shall remedy the issue within 12 hours.

3.2.6 CONTROL OF OTHER CONSTRUCTION POLLUTANTS

- (1) Concrete Truck Washout: Concrete truck washout shall not discharge surplus concrete or drum wash water on the site in such a manner that promotes contact with storm waters or natural streams discharging from the site.
- (2) Construction Waste: All construction waste material shall be collected, deposited, and stored in a manner to prevent contact with storm waters discharging from the site and shall be disposed of by a licensed solid waste management contractor. No waste shall be buried on the site.
- (3) Sanitary Waste: A state licensed sanitary waste management contractor shall collect all sanitary waste from portable units that will be maintained on a regular basis for any site that cannot provide other means of sanitary waste disposal.
- (4) Petroleum Products: All construction equipment and vehicles shall be monitored for leaks and receive regular preventative maintenance to ensure proper operation and reduce the risk for leaks or spills. Petroleum products shall be stored in clearly labeled and tightly sealed containers or tanks. Fuel or oil contaminated soil shall be removed and disposed of properly.
- (5) Fertilizers: Fertilizers shall be applied following manufacturer's recommendations. Fertilizers shall be stored in a covered area or in watertight containers. Partially used products shall be properly sealed and stored to avoid spills or leaks.
- (6) Hazardous materials: Storage areas for hazardous materials such as oils, greases, paints, fuels, and chemicals, shall be provided with secondary containment to ensure that spills in these areas do not reach waters of the State. All hazardous waste materials shall be disposed of according to state regulation or the manufacturer's recommendations.

3.3 FEES

The City has the ability to require a fee to support local plan review, inspection and program administration. Each developer/owner seeking a land disturbance or stormwater discharge permit shall pay a fee upon submittal of the plans, in amounts set forth below.

- (1) Stormwater Discharge Permit: \$40.00
- (2) Major Amendment to a Stormwater management construction plan: \$25.00
- (3) Land Disturbance Permit: \$60.00 for projects up to 1 acre, \$5.00 per acre thereafter.

3.4 Inspection Requirements

The City may periodically inspect development sites. Through such periodic inspections, the City shall ensure that the Erosion and Sediment Control (ESC) Plan and Stormwater Pollution Prevention Plan (SWPPP) are properly implemented and any necessary amendments are made in order to protect the environment and the public's health, safety and welfare. The erosion and sediment control measures for the site must be maintained by the developer until the site is stabilized and the permit is terminated.

The permittee shall notify the City at least two (2) working days before the start of site clearing to schedule the Preconstruction meeting.

The permittee must conduct regular inspections of all control measures in accordance with the inspection schedule outlined on the approved erosion and sediment control plan(s) or in the Stormwater Pollution Prevention Plan (SWPPP). The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for additional control measures and/or maintenance of existing measures. All inspections shall be documented in written form and kept readily on site.

3.5 Permit Termination

A land disturbance project will be considered stabilized when perennial vegetation; pavement, buildings, or structures cover all previously disturbed areas. In vegetated areas, 100% of the site must be covered with at least 70% density. All temporary BMPs must be removed. To terminate the land disturbance permit, the permittee must request a final inspection, and provide the inspector with MDNR Form H Request for Permit Termination. The inspector will conduct the inspection to ensure the site is fully stabilized and all temporary BMPs have been removed.

3.6 ENFORCEMENT

Failure to comply with the provisions of this regulation promulgated under the authority of Section 25-90 of the St. Joseph City Code shall subject the permittee to the fines and corrective actions authorized in Chapter 25 and related sections of the St. Joseph City Code. The City may suspend or revoke any permit associated with the site or any permit associated with the person(s) holding the permit(s) for the site for noncompliance with the Land Disturbance Permit or Stormwater Discharge Permit.

Procedure: Upon discovery of a violation of this article, the contractor will be notified and given up to fourteen (14) days to remedy the violation(s) in a Land Disturbance Permit. Extensions of time may be granted in the Director's sole discretion.

If the violation has not been remedied within the time frame set forth in the notice, a stop work order may be issued and the permit(s) will be suspended. The stop work order shall state the reason for the order and the conditions under which the order and suspension will be lifted.

Any person, who shall continue to engage in activity for which a permit is required after having been served with a stop work order, except in such work as that person is directed to perform to remove a violation or unsafe condition, shall be a violation of this ordinance.

After two (2) stop work orders of a permit for the same site for similar violations, the permit(s) shall be revoked. All applicable procedures will have to be followed for re-issuance of the permit(s). Additionally, any remediation or abatement costs will be required to be paid prior to re-issuance.

If the stop work order has not been lifted through compliance with its terms within thirty (30) days from the date of its issuance, the permit shall be revoked. All applicable procedures will have to be followed for re-issuance of the permit(s). Additionally, any remediation or abatement costs will be required to be paid prior to re-issuance. Engaging in activity requiring a permit without first obtaining such permit shall be a violation of this section.